REAL-TIME TACTICAL SIMULATION OF MODERN ARMORED WARFARE

BATTALION COMMANDER

™

SSI
™

STRATEGIC SIMULATIONS, INC.

LIMITED WARRANTY

Strategic Simulations, Inc. ("SSI") warrants that the diskette on which the enclosed program is recorded will be free from defects in materials and workmanship for a period of 30 days from the date of purchase. If within 30 days of purchase the diskette proves defective in any way, you may return it to Strategic Simulations, Inc., 883 Stierlin Road, Building A-200, Mountain View, CA 94043-1983 and SSI will replace it free of charge. In addition, if the diskette proves defective at any time after the first 30 days, return the diskette to SSI and SSI will replace it for a charge of $10.00. Please allow about four weeks for delivery.

SSI MAKES NO WARRANTIES, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE SOFTWARE PROGRAM RECORDED ON THE DISKETTE OR THE GAME DESCRIBED IN THIS RULE BOOK, THEIR QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. THE PROGRAM AND GAME ARE SOLD "AS IS." THE ENTIRE RISK AS TO THEIR QUALITY AND PERFORMANCE IS WITH THE BUYER. IN NO EVENT WILL SSI BE LIABLE FOR DIRECT, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT IN THE PROGRAM OR GAME EVEN IF SSI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. (SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF IMPLIED WARRANTIES OR LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.)

The enclosed software program and this Rule Book are copyrighted. All rights are reserved. This Rule Book may not be copied, photographed, reproduced, or translated or reduced to any electrical medium or machine-readable form, in whole or in part, without prior written consent from SSI. The program accompanying this Rule Book may be copied, by the original purchaser only, as necessary for use on the computer for which it was purchased.

© **1985 by Strategic Simulations, Inc.**
All Rights Reserved.

If you are unable to make a backup copy of your disk (most of our games have some form of copy-protection), you may purchase a backup disk from SSI for $10 plus $2 for shipping and handling. California residents, add applicable sales tax.

What to do if you have a defective disk

Each of our games undergoes extensive playtesting prior to its release. Through this process we hope to uncover, and correct, any errors in programming. However, due to the complex nature of our simulations, some program errors may go undetected until after publication. In addition to errors in the program, there are occasionally problems with the disk itself. We experience the industry standard of approximately a 3 to 5% failure rate of duplicated disks. Before assuming that a disk is defective, make sure to check your disk drive. Up to 95% of the disks returned to us as defective will run fine on our computer systems. Often the problem is with a disk drive that needs servicing for alignment, speed, or cleaning.

Should you have a defective disk, please return the disk only (keep all other parts of the game) to our Customer Support Department, along with a note describing the problem you have encountered. A replacement disk will be provided upon our receipt of the defective disk.

Should you uncover an error in the program, return both your game disk and any "save game" disks to our Customer Support Department. Please enclose a description of what was taking place in the game when the error occurred. Upon correction of the program error, we will return an updated disk to you.

Always make sure to include your name, address, and daytime telephone number with any correspondence. We will do our best to see that any problems are corrected as soon as possible.

TABLE OF CONTENTS

I. INTRODUCTION

BATTALION COMMANDER puts you in command of a modern fighting force the size of an army battalion. The game lets you experience small unit combat on the modern battlefield. The game system is not hard to learn. Use the joystick to point to a location on the battlefield, one key to designate which unit will receive the order, and one key for the order itself. Section IV of this manual contains a brief description of the game system. Section V contains additional information of the nice-to-know variety, which can be read at your leisure. The organization of material is intended to minimize the amount of extraneous information you must sift through before playing the game.

II. DISK LOADING INSTRUCTIONS

1. COMMODORE 64™ VERSION

- Insert diskette and turn on disk drive.
- Turn on the computer.
- Type LOAD"*",8,1. Hit (RETURN). The program will start as soon as it loads in.

2. ATARI® VERSION

This requires 48K of RAM. Remove any cartridges before loading the program.

- Insert the diskette and turn on the disk drive.
- Turn on the computer. (800XL: Press the OPTION key.)
- The program will load and start automatically.

3. APPLE® VERSION

This requires 64K of RAM.

- Insert the diskette and turn on the computer.
- The game will load and start automatically.

III. NOVICE GAME

You should play the novice game first, to get used to BATTALION COMMANDER's game system, before you tackle the more advanced games. With practice, the simple two keystroke commands will become second nature to you, and you can take on the toughest missions as Battalion Commander.

After the game starts, the computer will ask you to:

SELECT GAME:
(1) NOVICE
(2) PURSUIT AND EXPLOITATION
(3) MEETING ENGAGEMENT
(4) ATTACK
(5) DEFENSE

Hit the (1) key to start the NOVICE game. After a few seconds the battlefield will be displayed.

After you start the NOVICE Game, pause it by hitting the SPACE BAR on your computer. With the game paused, you can look around on the battlefield without worrying about getting shot up by the enemy.

Your objective in this game is to destroy a Soviet tank battalion, out of sight of your units, to the North. Brigade Intelligence advises us that the Soviet tank battalion consists of two companies, similar in structure to ours. You receive points for destroying enemy units, just as the Soviet commander, the computer, receives points for destroying your units.

There is a black square-shaped cursor in the upper left corner of the screen. Use the cursor to point out a unit or position on the screen to the computer. It is part of the method of communicating with your computer. To move the cursor, you may use either a joystick or the keyboard:

1. COMMODORE 64 VERSION
Plug a joystick into Joystick Slot #2. Move the joystick to move the cursor.

2. ATARI VERSION
Plug a joystick into Joystick Slot #1. Move the joystick to move the cursor.

3. APPLE VERSION
Connect a joystick to the game controller port. Move the joystick to move the cursor.

4. ALL COMPUTERS
You may control the cursor by using the keyboard. To move the cursor this way, hold down the (CONTROL) key and hit the (I) key to move the cursor up, the (M) key to move it down, the (J) key for left, or the (K) key for right.

CONTROL and [J] ←→ [K], [I] up, [M] down
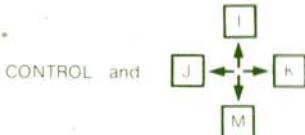
Only a portion of the battlefield can be viewed at a time. To see the Northern (upper) part of the battlefield, move the cursor past the top of the screen. The screen scrolls when you try to move the cursor past a side of the screen. Notice the black tank characters and the truck character? They represent the platoons in your battalion.

Let's position the cursor directly over a unit. Information on the unit is displayed when the cursor is directly over it. You will see that putting the cursor on top of a unit causes the title and status of the unit to be displayed. The information below the unit

title gives you the number of personnel (PERS) and the number of vehicles (VEHI) in the unit. These numbers will decrease as your units suffer casualties.

To issue an order, hit two keys:
- The first key designates the unit to receive the order.
- The second key corresponds to the order you are giving.

The three units you command directly are:
A — Company A,
B — Company B, and
H — Battalion Headquarters.

The orders you can give include:
G — Go to position marked by cursor.
N — Normal fire. This instructs the unit to fire at will.
H — Hold your fire.
F — Provide suppressive **F**ire at position marked by cursor. Suppressive fire is used to reduce the enemy's ability to fire accurately and rapidly at your units. Machinegun or high explosive fire is used in this mode to make enemy tank units "button up", reducing their ability to see the enemy.
S — Provide **S**moke screen at position marked by cursor. Smoke obstructs the vision of enemy units.
A — Assume command of company. After you assume command of a company, you may issue orders directly to its platoons, numbered 1 to 4 by hitting the number key corresponding to the number of the platoon.
C — Returning **C**ommand of company. This tells the computer to resume its command of the company. After you give this order you will give orders to the company headquarters instead of individual platoons.

The game will end if:
- You hit the (CONTROL) key and then hit the (E) key for "**E**nd game", or
- One side is substantially destroyed (95%).

To end the pause, hit the SPACE BAR again. Try out the Novice Game to get used to the game system. After you become comfortable, move on to the additional information to play the regular games.

IV. GAME SYSTEM

1. GAMES AVAILABLE
There are four regular games you can choose from:

a. Pursuit and Exploitation. In this scenario, your forces have the mission of exploiting a penetration of the enemy's defensive system. The term "pursuit and exploitation" refers to the actions taken by an attacker to decisively defeat a defender whose defenses have been disrupted. After a defense has been penetrated, the attacker will usually attempt to turn the temporary success into a decisive victory by penetrating deep into the defender's territory, destroying or capturing enemy forces, including artillery batteries, supply depots, and higher headquarters units.

(1) Each side receives points for destroying enemy units. You also receive points for capturing special enemy units. You capture a special unit by placing one of your units on top of it. Special units can only be captured; they cannot be destroyed. Special units include:

— Artillery Batteries   150 Points

— Supply Depots   250 Points

— Higher Headquarters   500 Points

(2) The battlefield is normally limited to 12.8 kilometers from north to south. However, in this game you can move the display of the entire battlefield 6.4 kilometers by hitting the (CONTROL) key for Control order, then hitting the (S) key for "Scroll." When you do this, the northern half of the battlefield moves down to the southern half and a new battlefield area appears in the northern half. The direction of movement is one way — you can move the entire battlefield 6.4 kilometers forward but not backward. When you do this kind of scroll, all units in the southern half of the battlefield will be removed from the game. Naturally, you will need to make sure that your units are in the northern half of the battlefield (above the number 6 on the side of the display) before the scroll. Enemy units that were in the southern half of the battlefield before the scroll will be removed; however, you will receive no points for their elimination since you did not capture or destroy them. Since artillery batteries, supply depots, and higher headquarters are originally located off the battlefield to the North, you must use the special scroll twice to be able to approach them.

b. Meeting Engagement Game. In this game, forces of about equal strength fight it out in what is called a "meeting engagement." A meeting engagement is an unexpected encounter with an enemy force, resulting in a battle. The Meeting Engagement Game is a sort of military chess, with victory going to the side that displays the greater skill.

At the start of the game, each side will have one battalion equal in relative strength to that of the enemy battalion. The forces and combat strength for each nationality will vary, to provide each side with equal chances at the start of the game. You and your enemy each receive points for destroying the forces of the opponent.

c. Attack Game. In this game your objective is to break through the enemy defenses to occupy a key terrain feature marked with a blue "X." You will have a roughly two-to-one advantage in strength over your opponent. With these combat odds you can't lose, right? Not exactly. This game illustrates that the advantages of the defender often will outweigh a lack of combat strength.

Your side will have two battalions to oppose a single enemy battalion. You will command the 1st Battalion (black) while the computer will control the 2nd Battalion (grey or, in Apple Version, purple). Note that the computer's 2nd Battalion will tend to operate to the east of your 1st Battalion.

Each side receives points for destroying units on the opposing side. Also, points are given to the attacker for occupying the objective location or to the defender for recapturing the objective. The game ends either after one side is destroyed or after the key position is occupied continuously by the attacker for ten minutes.

d. Defense Game. The player in this game will be opposing the player in the Attack Game. The defender's objective is to keep the attacker from occupying the objective position marked with a blue "X" on the terrain map. Scoring is the same as in the Attack Game.

2. OPTIONS
For all games other than the Novice Game, the computer will allow you to adjust the nationality of forces, the type of terrain, and relative strength of forces.

a. Nationality of Battalion. You may select ground forces from either the United States, the Soviet Union, or China for either your side or the enemy's side. Force structures pretty accurately reflect the actual forces of the three nations. Please note that the strength of a US battalion will be reduced by about 20% when opposing a Soviet battalion and 50% when opposing a Chinese battalion. A Soviet battalion is reduced about 30% when opposing a Chinese battalion. The purpose of these reductions is to provide play balance between forces of differing intrinsic strengths.

b. Terrain Maps. Forty terrain maps are available. Each map has a specific mix of terrain features to represent geographical areas in which future battles may be fought. A table showing the features of the various terrain maps is contained in Appendix A. When the computer asks for the number of terrain map, enter the two digit number, from 01 to 40, corresponding to the terrain map you want for the game.

c. Relative Strengths. The game may be made more difficult or less difficult by changing the relative strength of the two sides:

−1 reduces your strength by 50%.
−2 reduces your strength by 20%.
−3 reduces neither side.
−4 reduces enemy's strength by 20%.
−5 reduces enemy's strength by 50%.

3. TERRAIN SYMBOLS
The following terrain symbols may be encountered. In the Apple version, terrain symbols shown as grey will appear black.

 a. Mines (grey)

 b. Rough Area (green)

 c. Forest Area (green)

 d. River (blue)

 e. Road (grey) or Contour Line (green)

 f. Village (grey)

 g. Objective Position (blue)

 h. Burning Vehicles (grey)

i. Combat Units:

 (1) Platoon Equipped with Tanks

 (2) Platoon with Personnel Carriers

 (3) Platoon with Trucks

 (4) Platoon without Vehicles

j. Non-Combat Special Units (Pursuit and Exploitation Game):

 (1) Artillery Battery

 (2) Supply Depot

 (3) Higher Headquarters

4. COMMAND STRUCTURE

a. General Principle. The Battalion Commander normally issues orders to Company Commanders. Company Commanders, in turn, issue orders to Platoon Leaders, and so on, until everyone has orders consistent with the intentions of the Battalion Commander.

b. Direct Control of Platoons. The Battalion Commander issues orders directly to Battalion Headquarters, platoons in the Combat Support Company, and platoons of companies temporarily under his direct command. The Battalion Commander may take over temporary command of one company at a time. When he does this he still remains in command of the battalion.

5. UNITS UNDER YOUR COMMAND

a. Companies. You may command up to four companies, depending on the game selected and nationality of each side. Companies are designated by letters, A, B, C, and D. To tell the computer which company you want to give an order to, hit the letter key A to D, corresponding to the company.

b. Platoons. If you are in direct command of a company, you may issue orders directly to its platoons. Platoons are numbered 1 to 6. Hit the number key for the number of the platoon you want to give an order to.

c. Combat Support Company. In addition to the combat forces under your command, you also command a battalion headquarters and some platoons of the Combat Support Company:

— Supply Train. This unit delivers ammunition, fuel, and other supplies to your units. The S-4 Officer of your Headquarters Staff provides necessary guidance to the Supply Train concerning its operations.

— Battalion Headquarters. This is where you are located. It is an important unit, so big points are awarded for its destruction.

— Scout Platoon. This consists of infantry mounted in infantry carriers (US) or trucks (China). The infantry may be dismounted from the vehicles and can operate independently of the carriers. You designate the Scout Platoon by hitting the (S) key. If the infantry is dismounted, you can designate it by hitting the (I) key.

— Heavy Mortar Platoon. United States and Soviet Battalions both have a Heavy Mortar Platoon assigned to their Combat Support Companies.

— Antitank Platoon. A United States infantry battalion will have an Antitank Platoon assigned. Tank battalions do not contain this platoon. An Antitank Platoon contains vehicles that mount highly sophisticated and deadly antitank guided missiles.

— Engineer Platoon. This platoon is used for fighting and for bridgework. To remove a bridge, position the cursor above or below the position of the bridge on the screen. Then tell the Engineer Platoon to remove the bridge by pressing "R". The Engineer Platoon will go to the position you designate and, after a few minutes, the bridge will disappear. Bridge construction is a bit trickier, since only certain places are suitable for bridge construction. In the game, only straight, horizontal stretches of river are suitable for constructing bridges. If you send the Engineer to the wrong area, it will send you a message to that effect. Be patient in waiting for the Engineers to do bridgework. It will take a certain number of minutes to accomplish the task after they arrive at the location. Please note that you DO NOT place the cursor over the bridge or bridge site. The cursor is placed above or below the site with "R" or "B" pressed to respectively remove or build the bridge.

d. Fire Support Officer (FSO). This member of your Battalion Headquarters staff is responsible for coordinating artillery support for your battalion. No heavy artillery is assigned to a battalion. Artillery is assigned to higher headquarters, including brigade and division level. To obtain fire support, you must give an order to the Fire Support Officer, who passes on the request to higher headquarters. Up to two fire requests may be acted on at a time and two targets engaged. A fire support mission will terminate after 5 minutes unless you renew it by issuing the order again.

e. Keys used to designate units to receive orders:

UNIT TITLE	KEY
Company **A**	A
Company **B**	B
Company **C**	C
Company **D**	D
Platoon Number **1** to **6** in Company you Command	1-6
Supply Train (operation is fairly automatic)	None
Engineer Platoon	E
Battalion **H**eadquarters	H
Scout Platoon (Carriers)	S
Scout Platoon (**I**nfantry)	I
Heavy **M**ortar Platoon	M
Anti**T**ank Platoon	T
Fire Support Officer (FSO)	F

If you hit the wrong key, and do not wish to give an order to the unit corresponding to the key pressed, hit the (DELETE) key.

6. ISSUING ORDERS

a. Orders that you can give to your units are listed in the table below.

If you try to give an order to a unit that is unable to carry it out, the computer will not recognize the key press corresponding to the order.

Orders are passed on to your subordinate units every 15 seconds. This is when the Message Center of each side is operating. When the Message Center is in the process of sending a message, an "M" appears in the bottom right-hand corner of the text area of the screen. You can expect some delay between the time an order is issued and when it is carried out, due to the Message Center.

b. Pausing the Game. To pause the game, hit the SPACE BAR. This will pause the game immediately. While the game is paused, you may examine the battlefield. You may not issue orders while the game is paused. Hit the SPACE BAR again to continue the game.

c. Ending the Game. To end the game, hold down the (CONTROL) key, then hit (E) key for "**E**nd Game." To then start a new game, hit the (RETURN) key.

d. Repeating a Message Received. During the game, you may receive a message from one of your units and erase the message before you get a chance to read it. You may repeat the last message received by hitting the (R) key for **R**epeat Message.

e. Special Scroll in Pursuit and Exploitation Game. As mentioned in IV.1.a., there is a special scroll available in the Pursuit and Exploitation Game. To scroll the entire battlefield 6.4 kilometers, hold down the (CONTROL) key, then hit the (S) key for "special **S**croll." These scenarios require the map to be scrolled twice to reach the enemy units.

f. Time Acceleration. With this feature, you may double the speed of unit activity. Hold down the (CONTROL) key, then hit the (A) key for "**A**ccelerate Time." The game will return to normal time after the first shots are fired or you may direct the computer to return to normal time by holding down the (CONTROL) key, then hitting the (N) key for "**N**ormal Time."

g. Examining Direction of Movement. To see what direction a unit is moving (or facing if not moving), position the cursor over the unit and either hit the fire button of the joystick or hold down the (CONTROL) key and hit the (X) key. An arrow will appear in place of the unit indicating the unit's direction of movement.

LETTER	DESCRIPTION OF ORDER	APPLICABLE TO
G	**G**o to position marked by cursor	All units except Fire Support Officer (FSO)
N	Provide **N**ormal fire	All units except FSO
H	**H**old your fire	All units
F	Request suppressive **F**ire	All units
S	Provide **S**moke screen at cursor position	All units
T	Priority **T**arget for normal fire is at cursor position	All units except FSO
B	Establish **B**ridge at cursor position	Engineer Platoon
R	**R**emove bridge at cursor position	Engineer Platoon
D	**D**ig in your units	All units except FSO
A	**A**ssuming command of your company	Company Commander
C	Returning **C**ommand of your company	Company Commander
P	You are **P**riority unit for resupply	All units except FSO
+	Mount your infantry	Carrier Platoon
−	Dismount your infantry	Carrier Platoon

h. Moving the cursor. The cursor may be controlled by using the joystick or by using a combination of the (CONTROL) key with the (I), (M), (J), or (K) keys:

CONTROL and

```
        [ I ]
          ↑
[ J ] ←--+--→ [ K ]
          ↓
        [ M ]
```

i. Turning Sound Off or On (Apple only). The ESCAPE (ESC) key will toggle the internal speaker.

j. Summary of Control Orders:

DESCRIPTION OF ORDER	KEY(S)
Pause game	SPACE BAR
End game	CONTROL E
Start new game after end of game	RETURN
Repeat last message received	R
Special scroll in Pursuit and Exploitation game	CONTROL S
Accelerate time	CONTROL A
Return to normal time	CONTROL N
Examine direction of unit movement	CONTROL X
Move cursor up	CONTROL I
Move cursor down	CONTROL M
Move cursor left	CONTROL J
Move cursor right	CONTROL K
Toggle speaker — Apple version only	ESCAPE

7. UNIT STATUS

a. In General. If you position the cursor on top of a unit, the computer will provide the title of the unit and a report on the status of the unit in terms of strength, supply condition, and troop condition.

b. Friendly Units. The report on a friendly unit includes:

(1) *Unit Title.* If the unit is a mechanized infantry (US) or motorized rifle (Soviet) platoon, it may contain infantry that can be dismounted and controlled as a separate platoon. If so, there will be a "(+)" after the unit title. After the title of the Supply Train, the computer will indicate which company it is in the process of resupplying, as "(R: Company Title)."

(2) *Strength.* The report will show the number of personnel and vehicles.

(3) *Supply Condition.* The amount of fuel and amount of each type of ammunition are represented as numbers from 0 to 9. The number is the first digit of the percentage of

supplies the unit has. For example if the unit has 25% of its fuel and 05% of its rifle ammunition remaining, this will be shown on the second line of the status report as "FUEL 2 AMMO 0." Up to three numbers may be displayed to show the amount of ammunition for the three types of weapons the unit may have. The first number is rifle ammunition. The second and third numbers represent ammunition for heavy weapons. For a list of heavy weapons assigned to various units, refer to Appendix B.

(4) *Troop Condition.* In the lower left hand corner of the report you will see a one-word description of the condition of the troops. The condition is a composite rating of fatigue and morale. It will be either "GOOD", "FAIR", "TIRED", or "BROKEN", depending on what shape the units are in.

c. Enemy Units. The report includes the unit title and strength. The strength report is in terms of the number of enemy troops or vehicles seen. For that reason, it is often below the number actually there. For example, your forces may spot 5 men in an enemy platoon, kill 2, then count 6 men. What happens is that your forces notice 3 men that were previously hidden from their view.

8. UNIT DIRECTION

a. In General. The men who make up a platoon will tend to face in one of 8 directions. If the platoon is moving, it will face in the direction of movement. If stationary, the unit will face in the direction of its target, usually the closest or most dangerous enemy unit.

b. Looking at the Direction of a Unit. As described earlier, you can see what direction any unit is facing by positioning the cursor over it and pressing the joystick fire button or the keys, (CONTROL) (X).

c. Effect on Vision. A platoon will tend to have the greatest probability of seeing an enemy unit in front of it. Portions of the platoon may look around but have a lower chance of seeing an enemy unit on the flanks or rear.

CHANCE OF LOOKING IN A DIRECTION:

```
           100%
    75% ( FACING ) 75%
    30%          30%
           10%
```
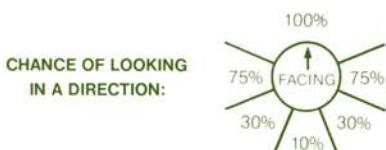
d. Effect on Combat. Tanks are vulnerable to attacks from the flanks or the rear since the side and rear armor of tanks is much thinner than front armor. To a lesser

extent, thin-skinned vehicles and infantry are also more vulnerable to attacks from the side or rear.

USUAL CASUALTIES

INFANTRY 10% HIGHER
ARMOR 20% HIGHER

FACING

INFANTRY 10% HIGHER
ARMOR 20% HIGHER

INFANTRY 20% HIGHER
ARMOR 50% HIGHER
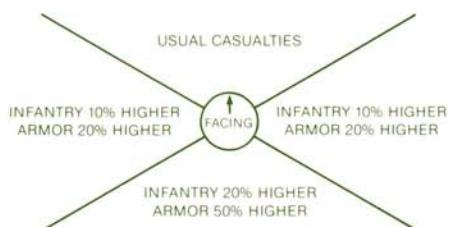
e. How to Change the Direction of a Unit.
You cannot control the direction of a unit that is moving since it will always face in the direction of movement. To control the direction of a unit that is not moving, you may either:

(1) Issue an order for indirect fire. The unit will then face in the direction of its target, or

(2) Issue an order for a normal fire target. The unit will then face in the direction of the cursor position at the time the order is given.

V. OTHER USEFUL INFORMATION

1. INTRODUCTION
This section of the manual provides a brief explanation of the concepts of modern warfare and other information to enhance your understanding and enjoyment of the game, BATTALION COMMANDER. It includes information on the organization of forces, a description of the various weapons and vehicles, a brief overview of the tactics used in modern warfare, and a few notes on the design of the game.

2. ORGANIZATION OF FORCES
Army forces are organized into units. Each type of unit has a particular function to accomplish:

— Rifle Platoon is the basic fighting force.

— Tank Platoon acts as a fast striking force.

— Antitank Platoon protects other units from tanks.

— Supply Train (platoon) provides fuel and ammunition to other units.

— Scout Platoon obtains information (referred to as "intelligence") on enemy forces and acts as a screen between the enemy and the main body of forces.

— Engineer Platoon constructs field works to facilitate or restrict the movement of forces.

— Machinegun Platoon provides extra firepower to key areas of the battlefield.

— Motorized Rifle Platoon is the same as the Rifle Platoon except that it is more mobile since it is transported by infantry carriers.

— Mortar Platoon provides indirect fire at long ranges.

— Headquarters Platoon directs the actions of the other units.

The basic level of unit in the game, BATTALION COMMANDER, is the platoon. A platoon will usually contain from 20 to 40 men. The platoon may be further divided into 2 or 3 sections. Sections may be further divided into squads containing a few men each. Since BATTALION COMMANDER is a platoon level game, nothing below the level of platoon is shown as a unit.

Each higher level of unit is commanded by a higher ranking officer:

— A platoon is commanded by a lieutenant

— A company (which contains some platoons) is commanded by a captain.

— A battalion (which contains 3 or 4 companies) is commanded by a lieutenant colonel. This, of course, makes you a lieutenant colonel. If you are used to being an armchair general, please do not look on this as a demotion.

The Battalion Commander, your role in the game, issues orders to company and platoon commanders under his battalion. Subordinate commanders issue orders to their subordinates, and so on, until everyone has orders consistent with the intentions of the Battalion Commander.

This command process and structure is common to all modern armies, including the three featured in BATTALION COMMANDER, the US, Soviet, and Chinese armies. However, the organizational structure of the three armies varies significantly. Each of the three armies was established based on the types of forces considered a threat to national security and based on the resources available.

The organization of forces in the game is close to the actual tables of organization and equipment (TOE) of the combatants featured in BATTALION COMMANDER as of 1980. Some simplifications were made in the interest of playability. For instance, the Chinese tank battalion in the game is actually referred to as a regiment. The Chinese Assault Gun Company is referred to in the TOE as a battalion. To make the organization more compatible with the organizations of the other combatants, the Chinese tank regiment was renamed a battalion and the

assault gun battalion was renamed a company. Also, the organization of a US Army mechanized infantry company was simplified. The TOE for a mechanized infantry company consists of:

— Headquarters section with 11 men and one jeep, one 2½ ton truck, and two M-113 carriers.
— Maintenance section with 12 men and one jeep, one 2½ ton truck, one M-113, and one M-578.
— Three rifle platoons, each containing 38 men (of whom 30 may operate dismounted) and four M-113 carriers.
— Weapons platoon containing a headquarters section of 3 men with one jeep; a mortar section with 20 men and four M-113 carriers (one containing control equipment and three containing 81mm mortars); and an antitank section with 8 men and two M-113's.

This organization was simplified into three platoons of carriers and three platoons of infantry. The platoons were organized as:
— Headquarters platoon containing a headquarters section of 11 men with two M-113's; one maintenance section of 12 men and one M-113; one carrier section of 8 men and four M-113's; and a mortar section with 20 men and four M-113's.
— Two carrier platoons, each containing 8 men and four M-113's and an antitank squad with 4 men and one M-113.
— Three rifle platoons, each containing 30 men. If mounted in M-113 carriers, these are each made a part of the corresponding carrier or headquarters platoon.

If you add up the two organizations, they will come out about the same in men and material. Hopefully, my adjustments do not result in a significant distortion of reality.

3. COMBAT POWER
The main components of modern ground combat are infantry and armor. Each has certain capabilities and limitations:

a. Infantry.
(1) *Capabilities:*
— Protect tanks and antitank guided missiles (ATGM) from dismounted infantry and antitank (AT) gunners.
— Move mounted as rapidly as tanks.
— Can negotiate water barriers with relative ease.
— Suppress and kill soft targets with machineguns and small arms.

— Kill tanks and other armored vehicles with medium AT guns out to 1000 meters (10 characters on the screen) and light AT guns out to 200 meters.
— Dismount to:
  • Clear enemy infantry out of close terrain.
  • Dig in and hold ground against infantry assaults.
  • Provide security — outposts and patrols.
  • Lay mines.
(2) *Limitations:*
— Armored personnel carriers (APC) have thin armor and are easier to disable than tanks. A portion of mounted infantry become casualties when the APC they are riding in is destroyed.
— When dismounted, infantry is vulnerable to tanks, small arms, and artillery and mortar fire.

b. Tanks (and Assault Guns).
(1) *Capabilities:*
— Mobility, armor protection, and firepower.
— Ability to kill tanks and soft targets out to a range of about 2500 meters (a little longer for American tanks and shorter for Chinese tanks).
— Invulnerability to artillery and small arms.
(2) *Limitations:*
— Vulnerable to ATGM, AT guns, tanks, and mines.
— Difficulty in identifying infantry and AT gunners in close terrain (woods and cities).
— Unable to cross water barriers, except over bridges. This applies to American M60A1 and Chinese Type 59 tanks only. Amphibious Soviet T-62 tanks are able to swim across rivers as are the American and Soviet APC's in BATTALION COMMANDER.

4. WEAPONS
In BATTALION COMMANDER each platoon possesses a certain number of rifles and may also have one or two heavy weapons, such as machineguns, AT guns, or mortars. A brief description of the various weapons is provided:

a. Rifles. The rifles in BATTALION COMMANDER are all of 7.62mm calibre. The game assumes that American units are armed with M16A1 rifles, Soviet units are armed with AKMS rifles, and Chinese units are armed with Type 56 carbines. Rifles have a maximum range of about 1000 meters and a maximum effective range of about 200 to 300 meters.

b. Light Machine Guns. These have an effective range of about 1000 meters and a high rate of fire. In this game, the calibre of light machine guns of all combatants is 7.62mm, the same as the rifles. Light machine guns and rifles are effective against soft targets (dismounted infantry and trucks) but do not have the ability to penetrate armor of the thickness of APC's and tanks.

c. Heavy Machine Guns. These are part of the armament of APC's and tanks. They have a lower rate of fire than light machine guns but have a longer range (1500 meters) and higher calibre (12.7mm). Heavy machine guns also can disable thin-skinned armored vehicles such as APC's.

d. Light Antitank Weapons. These include rifle-propelled grenades and bazooka-type weapons. They have an effective range of about 200 to 300 meters but are not particularly lethal against tank armor of American and Soviet tanks even at short ranges. They often must be fired against the thinner areas of tank armor (rear and sides) to kill the tank.

e. Medium Antitank Weapons. In BATTALION COMMANDER, American infantry units are equipped with Dragon guided missile (ATGM) launchers as medium AT guns. Soviet and Chinese units have recoilless AT guns. All of the medium AT guns in the game have an effective range of about 1000 meters. The Dragon is more effective than recoilless AT guns, since the gunner is able to maneuver the guided missile toward the target after it is fired.

f. Heavy Antitank Weapons. The US and Soviet armies employ long-range ATGM as heavy antitank weapons. The Chinese armies are lacking in this type of weapon. The American heavy AT weapon is the TOW ATGM. With a range of about 3000 meters, it has an effective range about 500 meters farther than the gun of a tank. The Russians have a similar weapon in their Sagger. The Sagger has about the same range as the TOW but is a slower missile, is harder to control, and is easier to see in flight.

g. Mortars. A type of light artillery, the mortar is a short cannon that lobs shells high in the air. The shells fall almost vertically, allowing mortars to fire over hills and at remote targets. Heavy mortars have a longer range, larger radius of destruction, and a slower rate of fire than light mortars. Mortars can fire either high explosive (HE) or smoke ammunition. Mortars are considered indirect fire weapons since they fire at area targets, rather than specific targets. Mortar calibres and range in BATTALION COMMANDER are:

MORTAR	CALIBRE	RANGE
US M29 Light Mortar	81mm	4700 meters
Chinese Type 63 Light Mortar	60mm	1500 meters
US M30 Heavy Mortar	107mm	5400 meters
Soviet M1938 Heavy Mortar	120mm	6300 meters
Chinese Type 53 Motar	82mm	3000 meters

h. Howitzers. These are a type of heavy artillery used in support of ground forces. They have a long range, over 10,000 meters. The howitzers in the game are generally of 122mm calibre. Like mortars, they provide indirect fire with either smoke or high explosive ammunition.

i. Tank guns. Tanks fire high explosive, armor-piercing, and smoke ammunition. Armor-piercing ammunition is nearly as effective as ATGM at distances under 2500 meters. Beyond that point, the probabilities of hitting and destroying a target drop rapidly. The tank gun is the main armament of both the tank and the Chinese assault gun.

j. Grenades. All of the infantry units have grenades, both hand grenades and rifle-propelled grenades. The rifle-propelled grenade may be either high explosive, armor-piercing, or smoke. The range of these for smoke ammunition is 600 meters for the US, 800 meters for the Soviet Union, and 500 meters for the Chinese.

k. Mines. Combinations of antipersonnel and antiarmor mines may be laid by either infantry or engineer units. These result in few casualties but can slow down the movement of the enemy and "canalize" it into open areas.

5. VEHICLES

The four types of vehicles in BATTALION COMMANDER include trucks, armored personnel carriers (APC), assault guns, and tanks. Refer to the table in Appendix C for information on vehicles assigned to the various units in BATTALION COMMANDER. Although several different vehicles may be in a real unit, only one type of vehicle is in each unit in the game. The type of vehicle can be determined by looking at the character that represents the unit.

a. Trucks. Trucks lack the protection of armor. For that reason they can be destroyed by small arms fire. A wide variety of trucks are used in real life, ranging from jeeps to large tractor-trailers. The trucks in the game are a bit more standard. One thing to keep in mind about trucks is they do not move very

well off the road and must cross water at bridges.

b. APC's The US and Soviet armies are the only ones that have carriers as a part of the battalion organization in BATTALION COMMANDER. The Chinese have a shortage of carriers. In the Chinese People's Liberation Army, infantry carriers are assigned to the regimental headquarters, which can assign them to battalions as circumstances dictate. One of the main differences between the US M-113 APC and the Soviet BMP infantry combat vehicle in the game is the armament. The M-113 carrier is armed only with a heavy machinegun except for those in the antitank units, which are also armed with TOW heavy antitank weapons. The BMP is armed with a heavy machinegun, a 73mm smoothbore cannon that operates as a medium AT gun, and a Sagger ATGM launcher. Both the US and Soviet carriers have thin armor compared to tanks. This means that they are much more vulnerable to antitank fire than tanks. They also are vulnerable to heavy machineguns firing armor-piercing ammunition.

c. Assault Guns. Only the Chinese have assault guns in this game. The main difference between an assault gun and a tank is that the assault gun does not have a turret that revolves. The Chinese assault gun has the same gun as the Chinese Type 59 tank, a 100mm gun. By eliminating the revolving turret, the Chinese are able to put the gun on a lighter and cheaper chassis. The lack of a turret makes the assault gun less effective than a tank.

d. Tanks. The tanks in this game are similar, with two significant exceptions. The Soviet T-62 tank is the only amphibious one in the game. It is the only one of the three that can swim across rivers. The other exception is that the Chinese tank, the Type 59, is quite inferior to both the US M60A1 and Soviet T-62 tanks in both armament and armor. It is less lethal and more easily destroyed than the US or Soviet tanks.

6. COMBAT SUPPORT

The Combat Support Company provides logistical, engineer, and fire support to its battalion. The combat power of the Battalion Commander results from the concerted employment of the available combat and combat support. The Battalion Commander has direct control of the platoons assigned to the Combat Support Company. Each national force has its own particular organization of support elements. These combat support platoons may be available to you:

a. Supply Train. This unit delivers fuel, ammunition, and other supplies to your units. The operation of this unit, unlike any of the others, is basically automatic. You can find out which company has been selected by the S-4 (logistics) Staff Officer by putting the cursor over the Supply Train. Then you may choose to move the company to an area to meet the Supply Train or you can just let the Supply Train follow the unit until it catches up with it. The Supply Train, like your other units, can be destroyed. If so, it will eventually be replaced with a new Supply Train at the Southern end of the battlefield. Supplies are important. A unit that is out of fuel cannot move. A unit that is out of ammunition for one type of weapon cannot fire that type of weapon. The Supply Train resupplies one company at a time. It starts with the first platoon in the company and continues until all platoons in the company have been resupplied. In choosing which company it will resupply next, the Supply Train picks units farthest from the enemy and with the least supplies. If you are not happy with the S-4 selection of units for resupply, you may pick a unit for resupply, by hitting the key corresponding to the unit and then hitting the (P) key for "Priority unit for resupply."

b. Engineer Platoon. This platoon is used To remove a bridge, position the cursor above or below the position of the bridge on the screen. Then tell the Engineer Platoon to remove the bridge by pressing "R". The Engineer Platoon will go to the position you designate and, after a few minutes, the bridge will disappear. Bridge construction is a bit trickier, since only certain places are suitable for bridge construction. In the game, only straight, horizontal stretches of river are suitable for constructing bridges. If you send the Engineer to the wrong area, it will send you a message to that effect. Be patient in waiting for the Engineers to do bridgework. It will take a certain number of minutes to accomplish the task after they arrive at the location. Please note that you DO NOT place the cursor over the bridge or bridge site. The cursor is placed above or below the site with "R" or "B" pressed to respectively remove or build the bridge.

c. Heavy Mortar Platoon. This platoon has large calibre mortars, which are more powerful than mortars assigned to company mortar sections. This platoon and the battery of howitzers in direct support of your battalion make up most of the indirect fire support directly at your command. This support is important in the tactical role of suppression and obscuration.

d. Antitank Platoon. A US infantry or mechanized infantry battalion will have an Antitank Platoon assigned. This platoon contains M-150's, M-113 carriers with TOW ATGM launchers attached. In using this platoon, it is important to consider its capabilities and vulnerabilities. The Antitank Platoon is quite deadly against enemy armor out to a range of about 3000 meters. It is vulnerable since it uses thin-skinned vehicles, easily destroyed by tanks, ATGM, and AT guns. Also, it has a slow rate of fire. American combat doctrine recommends using the Antitank Platoon in a hit-and-run role against enemy armor.

e. Scout Platoon. This is used primarily for reconnaissance. Only American and Chinese battalions have such a platoon in the game. Soviet battalions do not have such units. The Soviets establish patrols out of regular combat units to perform reconnaissance of the enemy. American doctrine refers to the Scout Platoon as the eyes and ears of the Battalion Commander. The Scout Platoon contains infantry mounted in carriers (US) or trucks (Chinese). When the infantry dismounts, it forms a separate platoon and is controlled independently of the carriers. The US Army Scout Platoon in BATTALION COMMANDER is organized in the model of US Army, Europe, with 4 TOW missile launchers authorized. In contrast the Chinese Reconnaissance Platoon (Scout Platoon) is armed only with carbines.

7. BASIC TACTICAL DOCTRINE

Each of the three nations featured in BATTALION COMMANDER — the United States, Soviet Union, and China — has its own particular combat doctrine, established on the ular combat doctrine, established on the basis of past wars and projections of future conflicts. Rather than go into much detail on the variations of tactical doctrine, this manual will present some of the concepts generally held by modern military powers.

a. Relationship of Offense and Defense. The primary theory of war is that decisive results are achieved only through offensive action. The best defense cannot bring victory — it can only postpone defeat. Defense is considered a necessary form of combat used only to gain time to develop the capability to commence offensive action. When circumstances and enemy actions force a commander to assume a defensive posture, he must assume the initiative and resume offensive actions at the earliest possible time.

b. Surprise. To maintain the initiative, commanders must seize every opportunity to strike the enemy when and where he is not prepared. Surprise is sought at all times to paralyze the enemy's will to resist and deprive him of the ability to react effectively.

c. Suppression and Obscuration. Proper use of suppression and obscuration can effectively remove an enemy force from the battle, since a unit that is blind in battle is useless. Suppression refers to directing heavy fire against an enemy force for the purpose of temporarily removing the unit's ability to fire at friendly forces. Machinegun fire at a tank will not destroy it but will cause its crew to "button up", reducing its effectiveness by 50%. Obscuration refers to the use of cover and concealment to allow units to maneuver on the battlefield without being subjected to enemy fire. Where no natural cover exists, smoke may be used to hide the maneuvering force. American doctrine in particular stresses the importance of suppression and obscuration. According to US Army Field Manual 71-2, The Tank and Mechanized Infantry Battalion Task Force, "The task force commander must orchestrate suppression and obscuration to cover exposed elements that are moving to new positions or closing with the enemy. The task force commander who fails to do these things and do them well will lose."

d. Offensive Maneuvers. The goal of most maneuvers is to rupture enemy defenses in order to obtain decisive objectives or to penetrate deep into enemy positions. This is one of the primary areas of difference between US and Soviet doctrine. Whereas the US forces normally direct the main attack against a decisive objective, Soviet attacking units attempt to create gaps that will allow exploitation forces to strike deep into the enemy rear. Although the objectives of offensive maneuvers may vary, there are two basic maneuvers used by modern ground forces: envelopment and penetration.

(1) An envelopment may be close or deep. The close envelopment is a comparatively shallow maneuver directed against one or both flanks of an enemy force and is directly supported by fire from units attacking frontally. The deep envelopment is directed against the flanks or rear of the enemy to a depth beyond close fire support range of other attacking units. A force employed in a deep envelopment coordinates its tactical operations with units attacking frontally.

(2) The penetration is normally employed only when the enemy does not have an assailable flank. A penetration is the less

desirable maneuver since it uses a frontal assault, which can be expensive in terms of casualties. Its purpose is to create a gap in the enemy defense for subsequent exploitation by enveloping maneuvers. A frontal attack may also be used as a secondary effort or feint in support of a main enveloping force.

8. TROOP CONDITION

In this game, the computer keeps track of two factors affecting the performance of troops: fatigue and morale. Units can become tired from movement and from fighting. Troops subjected to heavy fire wear down quickly. Tired troops do not move or fight as well as fresh ones.

To tell how a unit is doing, get a status report on the unit by putting the cursor over the unit on the screen. In the lower left hand corner of the next area, you will see a one-word assessment of troop condition: good, fair, tired, or broken.

To improve the condition of a unit, position it away from the enemy and have it dig in. A few minutes of rest will often do wonders for a unit's condition.

9. COVER AND CONCEALMENT

Although these terms may at first glance seem to mean the same thing, there is a distinction that the game recognizes. Cover refers to the physical protection of troops such as that afforded by fox holes, trenches, buildings, and trees. Concealment refers to measures taken to keep from being seen by the enemy. To survive on the battlefield, a unit must make good use of both cover and concealment by using natural terrain features and by improving on them.

a. Digging In. In this game, when a unit stops moving, it digs in. After a unit starts digging in, its defensive position will gradually improve with the passage of time. A unit that has dug in is harder to see and harder to kill than one fully exposed to enemy fire. Digging in only takes place while a unit is not under fire from the enemy.

b. Smoke. A quick way to provide concealment for a unit is through the use of smoke. Most of the units are able to generate smoke. Refer to the table at Appendix B for a list of weapons of the various units that can produce smoke. If the unit possesses a weapon that can produce smoke and has sufficient ammunition, then it will be able to generate a smoke screen. After a unit fires a round of smoke ammunition at an area, the area will be covered with a dark grey cloud of smoke for a couple of minutes. Eventually, the smoke will dissipate. Smoke is useful for concealing the movement of forces.

10. COMBAT

a. Vision. Blue enemy units appear on the screen when they are visible to your units. Both your units and enemy units use the same line-of-sight rules for determining what units are visible and how well the units can be seen. Units on higher ground tend to see farther and better than units at lower levels of elevation. Units sitting still see enemy units better than units that are moving. Units that are not under fire from the enemy see better than units that are getting shot at. Units that fire their weapons are visible to their enemy. A unit that has recently been seen will have a greater chance of being spotted than a unit that has not been seen. Units will tend to see units in front of them more often than units to the sides or rear.

b. Effect of Terrain on Vision.

(1) *Woods.* The thicker the woods, the harder it is to see through them. Woods vary in thickness from very sparse (one tree per forest terrain symbol) to very dense (four trees per forest terrain symbol).

(2) *Hills.* Units cannot see through hills.

(3) *Smoke and Cities.* Units can see very little through smoke and cities.

(4) *Other Terrain.* Other types of terrain reduce visibility by a small amount per 100 meters.

c. Fire Orders.

(1) *Smoke.* If given the order to provide smoke, a unit will attempt to do so if it has the appropriate weapons, smoke ammunition, and is within the range of the weapon. If a unit cannot carry out the order to provide smoke, it will send you a message to that effect and will provide normal fire instead.

(2) *Suppressive Fire.* A unit ordered to provide suppressive fire will provide a constant stream of either high explosive, machine-gun, or rifle fire at the designated target. If you tell a platoon to provide suppressive fire at a target, it will fire at the specific area you designate. If you tell a company to provide suppressive fire, the Company Commander will pick out targets of opportunity within the general area for its platoons to fire at. A unit given the order to provide suppressive fire will not provide normal fire until ordered to do so.

(3) *Normal Fire.* With normal fire, a unit will normally pick out its targets as it sees fit from the group of enemy units that are visible to it. The selection of targets is based on the importance of the enemy unit, the types of weapons it has, and how visible the enemy unit is. Headquarters units, supply units, and powerful units such as tank platoons tend to

get top priority for direct fire. You can establish a priority target for normal fire for a unit by positioning the cursor over the enemy unit, designating which unit is to receive the order, and hitting the (T) key for "Normal Fire Target is at Cursor Position." After you do this, the unit will provide normal fire at the enemy unit you selected until the enemy unit is no longer visible to the unit receiving your order. After the enemy unit is no longer visible, your unit will resume the usual selection of targets.

d. Volume of Fire. How much fire a unit will provide at a target depends on the number of weapons the unit possesses, the rate of fire of the weapon being fired, the level of enemy fire being received by the unit, and whether the unit is moving.

(1) *Number of Weapons.* Refer to the table in Appendix B for the number of weapons authorized for each type of unit. The number of weapons a unit will actually have will depend on the number of vehicles the unit has (if the weapon is attached to vehicles) or the number of personnel assigned to the unit. For example, if a tank platoon has 2 tanks it will have 2 tank guns and 4 heavy machineguns. In contrast, if a US rifle company has 10 men, it has 2 light antitank guns, 1 medium antitank gun, and 10 rifles.

(2) *Rate of Fire.* Refer to paragraph V.4. for a discussion of the characteristics of each type of weapon in this game.

(3) *Suppression.* If a unit is being fired at, its rate of fire will be cut in half.

(4) *Effect of Movement.* In this game, units displace by sections, with the first section moving while the second section fires. This means that a platoon will, in effect, move and fire simultaneously, but both the adjusted rate of fire and speed of movement will be cut in half.

e. Display of Fire. You can see and hear the effect of weapons firing. When a unit fires, a tiny flash appears on the side of the unit facing the enemy and the explosions on the enemy unit are displayed. Each type of fire — rifle, machinegun, antitank, and high explosive — has its own display and sound effects. If the enemy unit suffers casualties, a cross will flash on and off, alternating with the character used to display the unit. The length of time the cross flashes will depend on the number of casualties; the heavier the casualties, the longer the cross flashes.

f. Movement. In moving between two points, a unit will normally choose the path of least resistance, tending to move on roads and open areas rather than through heavy woods, across rivers, or across rough areas or known minefields. When a unit comes under enemy fire, its path is selected, based primarily on the cover offered by the terrain.

g. Speed of Movement. The speed of movement is affected by the type of vehicle (if applicable), the type of terrain the unit is moving across, the fatigue of the unit, and whether the unit is firing at the enemy.

(1) *Type of vehicle.* Dismounted infantry moves very slowly. Trucks move fairly fast on smooth surfaces but do not move well across rough areas or up hills. The tanks, assault guns, and personnel carriers are the fastest vehicles in this game. American tanks and carriers have an advantage in speed over Soviet or Chinese armored vehicles.

(2) *Terrain.* Each type of terrain will affect the rate of movement of a unit. Note also that diagonal movement is about 30% slower than horizontal or vertical movement across the screen.

(3) *Fatigue.* A tired platoon will move more slowly than a fresh one.

(4) *Fire.* If the unit is firing, it will move at one half its normal speed.

11. RECOVERY OF DAMAGED VEHICLES.
A unit that has lost all its vehicles to enemy fire may repair one of its vehicles. To carry out the repair, the unit must be resting, the unit must be in good condition, and away from enemy fire. After the repair is completed, the unit will have the use of one vehicle.

12. REPLACEMENT OF DESTROYED UNITS
If a Battalion Headquarters or Supply Train is destroyed it eventually will be replaced. No other types of units are replaced. Until it is replaced, the side that loses its Battalion Headquarters cannot issue orders. The side losing the Supply Train cannot replace fuel or ammunition until that unit is replaced. Sorry, but those are the fortunes of war.

APPENDICES:

Terrain Characteristics

Weapons

Vehicles

APPENDIX A
Terrain Characteristics

Terrain Map Number	Cities	Rivers	Roads	Woods	Hills	Rough Areas
1	1	0	1	Scattered	None	Very Rough
2	2	1	2	Moderate	None	Moderate
3	0	2	1	Moderate	None	Moderate
4	3	0	3	Thick	None	Smooth
5	0	0	0	Thick	None	Smooth
6	1	2	2	Thick	None	Smooth
7	1	1	2	Dense	None	Smooth
8	0	2	1	Dense	None	Moderate
9	0	0	0	Scattered	Few	Very Rough
10	0	0	1	Moderate	Few	Very Rough
11	0	1	1	Scattered	Few	Very Rough
12	0	0	0	Moderate	Few	Rough
13	0	0	1	Moderate	Few	Moderate
14	3	0	2	Moderate	Few	Smooth
15	0	1	1	Thick	Few	Moderate
16	0	1	2	Moderate	Few	Smooth
17	2	1	3	Thick	Few	Smooth
18	0	0	0	Thick	Few	Rough
19	0	2	0	Thick	Few	Moderate
20	0	0	1	Thick	Few	Moderate
21	0	0	3	Thick	Few	Smooth
22	1	1	3	Dense	Few	Rough
23	0	0	1	Dense	Few	Moderate
24	1	1	1	Dense	Few	Smooth
25	0	2	1	Dense	Few	Smooth
26	0	0	0	Scattered	Few	Very Rough
27	0	1	1	Moderate	Hilly	Rough
28	1	2	1	Moderate	Hilly	Moderate
29	3	1	3	Moderate	Few	Smooth
30	2	2	2	Moderate	Few	Smooth
31	0	0	0	Thick	Hilly	Smooth
32	0	2	1	Thick	Few	Moderate
33	1	2	2	Thick	Hilly	Smooth
34	0	0	1	Dense	Hilly	Smooth
35	0	2	1	Dense	Hilly	Smooth
36	1	1	1	Dense	Hilly	Smooth
37	0	0	0	Thick	Mountainous	Smooth
38	0	1	1	Moderate	Mountainous	Smooth
39	1	2	1	Moderate	Mountainous	Moderate
40	2	1	2	Moderate	Mountainous	Moderate

APPENDIX B: Weapons

Unit Title	Number Rifles	Heavy Weapon #1 No.	Heavy Weapon #1 Type	Heavy Weapon #1 Notes	Heavy Weapon #2 No.	Heavy Weapon #2 Type	Heavy Weapon #2 Notes
US:							
Battalion HQ	31	5	Heavy Mach'gun		5	Light AT Gun	S
Supply Platoon	22	5	Light Mach'gun				
Engineer Platoon	18						
Antitank Platoon	24	12	Heavy Mach'gun	V	12	Heavy AT Gun	V
Scout Platton (Car.)	11	5	Heavy Mach'gun	V	4	Heavy AT Gun	V
Scout Platoon (Inf.)	24	2	Light Mach'gun		4	Light AT Gun	S
Heavy Mortar Platoon	27	4	Heavy Mortar	V,S	4	Heavy Mach'gun	V
Tank Company HQ	14	4	Heavy Mach'gun	V	2	Tank Gun	V,S
Tank Platoon	20	10	Heavy Mach'gun	V	5	Tank Gun	V,S
Mech Inf (MI) Co HQ	39	3	Light Mortar	V,S	5	Heavy Mach'gun	V
MI Carrier Section	12	5	Heavy Mach'gun	V	1	Heavy Mach'gun	V
MI Infantry Section	30	7	Light AT Gun	S	3	Medium AT Gun	
Rifle Company HQ	13	3	Light Mach'gun				
Rifle Platoon	38	7	Light AT Gun	S	3	Medium AT Gun	
Mortar Sec, HW Plt	20	3	Light Mortar		1	Light Mach'gun	
Antitank Sec, HW Plt	10	2	Heavy AT Gun		1	Light Mach'gun	
Soviet:							
Battalion HQ	30	5	Light Mach'gun		1	Light AT Gun	S
Supply Platoon	15	3	Light Mach'gun				
Engineer Platoon	16						
Mortar Platoon	36	6	Heavy Mortar	S	3	Medium AT Gun	
Tank Company HQ	3	2	Heavy Mach'gun	V	1	Tank Gun	V,S
Tank Platoon	12	8	Heavy Mach'gun	V	4	Tank Gun	V,S
Mot Rifle (MR) Co HQ	6	1	Heavy Mach'gun	V	1	Heavy AT Gun	V
MR Carrier Section	4	3	Heavy Mach'gun	V	3	Heavy AT Gun	V
MR Infantry Section	20	6	Light Mach'gun	V	3	Light AT Gun	S
Chinese:							
Battalion HQ	25						
Supply Platoon	12						
Engineer Platoon	16						
Scout Platoon (Car.)	11						
Scout Platoon (Inf.)	22						
Tank Company HQ	3	2	Heavy Mach'gun	V	1	Tank Gun	V,S
Tank Platoon	7	6	Heavy Mach'gun	V	3	Tank Gun	V,S
Assault Gun Co HQ	3	1	Heavy Mach'gun	V	1	Tank Gun	V,S
Assault Gun Platoon	7	3	Heavy Mach'gun	V	3	Tank Gun	V,S
Rifle Company HQ	16						
Rifle Platoon	33	3	Light AT Gun	S	3	Light Mach'gun	
Light Mortar Platoon	11	1	Light Mortar	S	3	Light AT Gun	S
Heavy Machinegun Plt	21	6	Heavy Mach'gun				
Light Machinegun Plt	16	3	Light Mach'gun				
Heavy Mortar Platoon	27	3	Heavy Mortar	S			
Antitank Platoon	27	3	Medium AT Gun		3	Light AT Gun	S

Notes:
V means the weapon is attached to a vehicle. S means that the weapon can fire smoke ammunition.

APPENDIX C: Vehicles

Unit Title	Number	Vehicle Type	Amphib
US:			
Battalion HQ	12	Truck	No
Supply Platoon	15	Truck	No
Engineer Platoon	5	M-113 Carrier	No
Antitank Platoon	12	M-113 Carrier	Yes
Scout Platoon (Carr.)	5	M-113 Carrier	Yes
Scout Platoon (Inf.)	0		
Heavy Mortar Platoon	4	M-113 Carrier	Yes
Tank Company HQ	2	M60A1 Tank	No
Tank Platoon	5	M60A1 Tank	No
Mech Inf. (MI) Co HQ	11	M-113 Carrier	Yes
MI Carrier Section	5	M-113 Carrier	Yes
MI Infantry Section	0		
Rifle Company HQ	3	Truck	No
Rifle Platoon	0		
Mortar Sec, HW Plt	3	Truck	No
Antitank Sec, HW Plt	2	Truck	No
Soviet:			
Battalion HQ	9	Truck	No
Supply Platoon	10	Truck	No
Engineer Platoon	5	BMP Carrier	No
Mortar Platoon	7	Truck	No
Tank Company HQ	1	T-62 Tank	Yes
Tank Platoon	4*	T-62 Tank	Yes
Mot Rifle (MR) Co HQ	1	BMP Carrier	Yes
MR Carrier Section	3	BMP Carrier	Yes
MR Infantry Section	0		
Chinese:			
Battalion HQ	6	Truck	No
Supply Platoon	10	Truck	No
Engineer Platoon	5	APC	No
Scout Platoon (Carr.)	6	Truck	No
Scout Platoon (Inf.)	0		
Tank Company HQ	1	Type 59 Tank	No
Tank Platoon	3	Type 59 Tank	No
Assault Gun Co HQ	1	SU-76 Assault Gun	No
Assault Gun Platoon	3	SU-76 Assault Gun	No
Rifle Company HQ	0		
Rifle Platoon	0		
Light Mortar Platoon	0		
Heavy Machinegun Plt	0		
Light Machinegun Plt	0		
Heavy Mortar Platoon	3	Truck	No
Recoilless Rifle Plt	0		

* Actually, there are 3 tanks per platoon in a tank regiment and 4 tanks per platoon in a motorized rifle regiment.

CREDITS

Game Design & Programming
David Hille

Game Development
Joel Billings & Chuck Kroegel

Playtesters
**Mark Shaheen, Elliot Jackson, Paul Lenoue,
David Cathernan & Robert Dalton**

Art & Graphic Design
**Louis Hsu Saekow, Kathryn Lee,
Dave Boudreau & Margo Walsh**

Typesetting
Abra Type

Printing
A&a Printers and Lithographers

DESIGNATION OF UNITS TO RECEIVE ORDERS

UNIT TITLE	KEY
Company **A**	A
Company **B**	B
Company **C**	C
Company **D**	D
Platoon Number **1** to **6** in Company you Command	1-6
Supply Train (operation is fairly automatic)	None
Engineer Platoon	E
Battalion **H**eadquarters	H
Scout Platoon (Carriers)	S
Scout Platoon (**I**nfantry)	I
Heavy **M**ortar Platoon	M
Anti**T**ank Platoon	T
Fire Support Officer (FSO)	F

SUMMARY OF CONTROL ORDERS

DESCRIPTION OF ORDER	KEY(S)
Pause game	SPACE BAR
End game	CONTROL E
Start new game after end of game	RETURN
Repeat last message received	R
Special scroll in Pursuit and Exploitation game	CONTROL S
Accelerate time	CONTROL A
Return to normal time	CONTROL N
Examine direction of unit movement	CONTROL X
Move cursor up	CONTROL I
Move cursor down	CONTROL M
Move cursor left	CONTROL J
Move cursor right	CONTROL K
Toggle speaker — Apple version only	ESCAPE

UNIT ORDERS

LETTER	DESCRIPTION OF ORDER	APPLICABLE TO
G	**G**o to position marked by cursor	All units except Fire Support Officer (FSO)
N	Provide **N**ormal fire	All units except FSO
H	**H**old your fire	All units
F	Request suppressive **F**ire	All units
S	Provide **S**moke screen at cursor position	All units
T	Priority **T**arget for normal fire is at cursor position	All units except FSO
B	Establish **B**ridge at cursor position	Engineer Platoon
R	**R**emove bridge at cursor position	Engineer Platoon
D	**D**ig in your units	All units except FSO
A	**A**ssuming command of your company	Company Commander
C	Returning **C**ommand of your company	Company Commander
P	You are **P**riority unit for resupply	All units except FSO
+	Mount your infantry	Carrier Platoon
—	Dismount your infantry	Carrier Platoon